RPS Solar Carve-Out

ANALYSIS OF SREC MARKET FLOWS AND COSTS

MA Department of Energy Resources
March 2010

Based on the formulas that regulate the RPS Solar Carve-Out program, DOER offers the following analysis of market dynamics and cost under a few simple scenarios. The analysis assumes exogenous and constant behavior of the solar development market, which does not reflect the design of the program which will induce changes to development activity. Hence, these scenarios are presented only to provide some guidance as to the behavior of the regulatory structure/formulas and anticipated costs of the program.

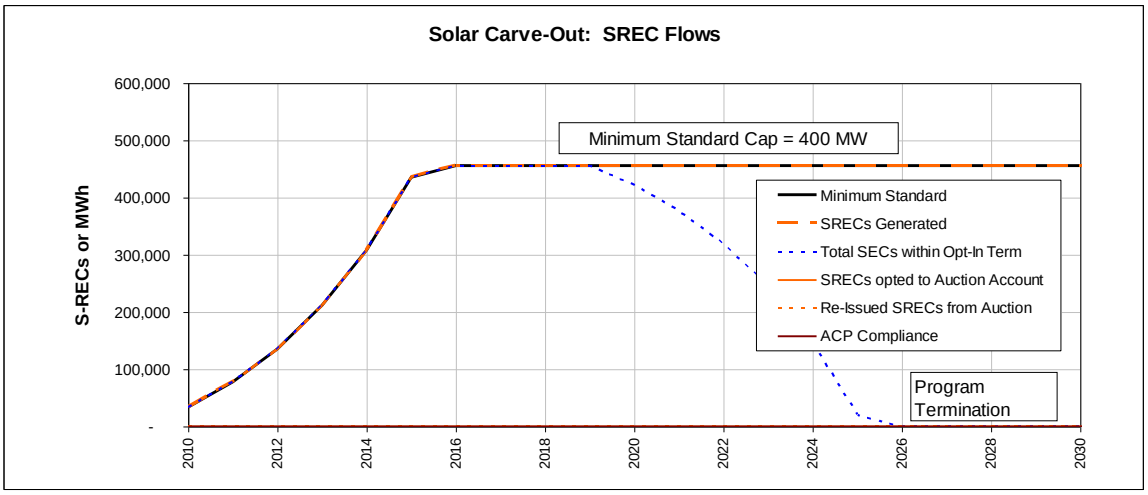
The scenarios and results are provided in the following sets of graphs.

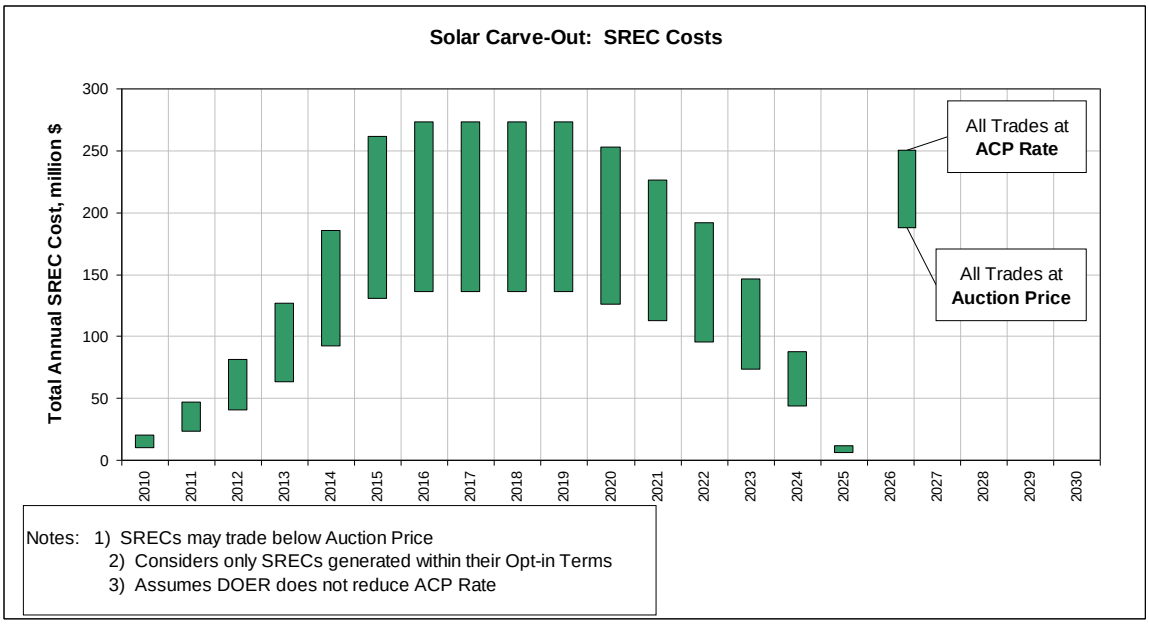
The cost analysis range is based on an ACP Rate of $600/MWh (does not account for rate reduction provided to existing contracts held by the competitive retail suppliers), and a fixed Auction Price of $300/MWh.

Scenario #1 – Graphical Results

Solar Capacity installed in 2010: 30 MW (full year available capacity)
Solar Installation Growth Rate: 30%/year

This scenario matches the 2010 Minimum Standard and the annual Base Growth Rate in the program regulations. Hence, the graphs show exactly equal balance between the Minimum Standard and SREC generation each year, with no reliance on the ACP Mechanism or the Auction Account.

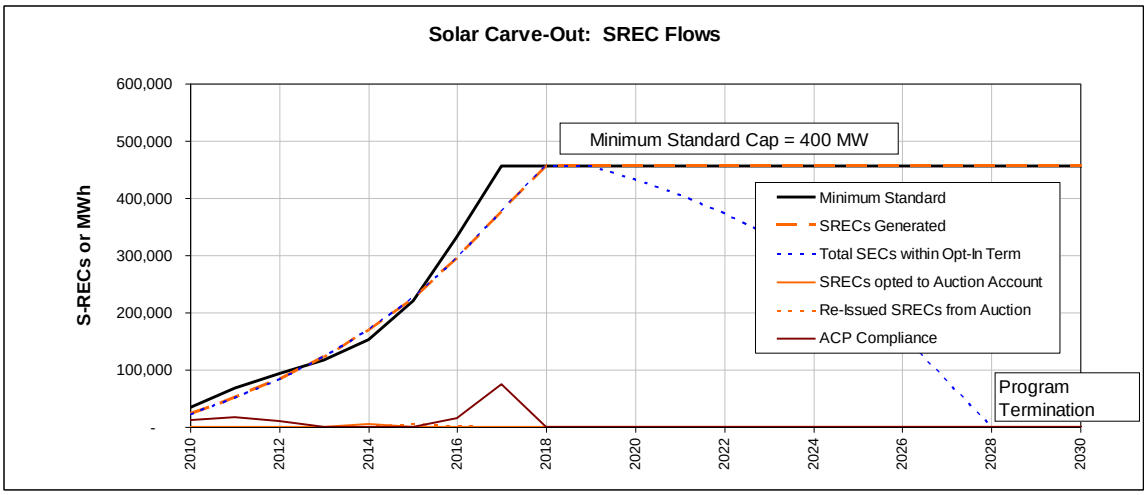


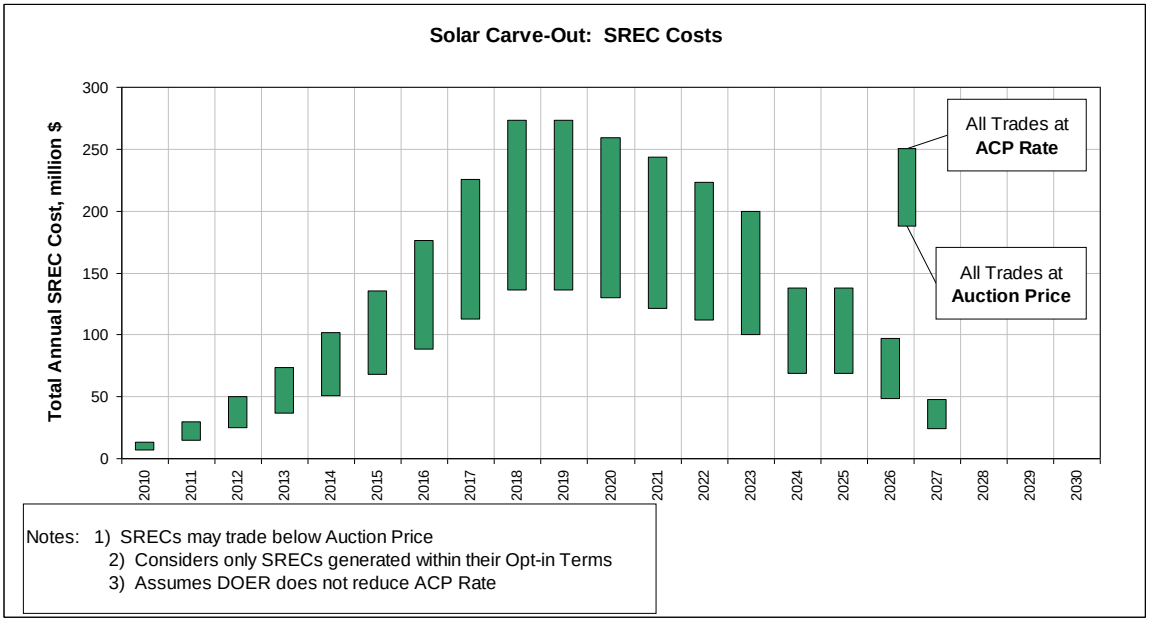


Scenario #2 – Graphical Results

Solar Capacity installed in 2010: 20 MW (full year available capacity)
Solar Installation Growth Rate: 20%/year

This scenario assumes that the solar market does not install sufficient capacity to meet the 2010 Minimum Standard and its growth rate remains below the Base Growth Rate.

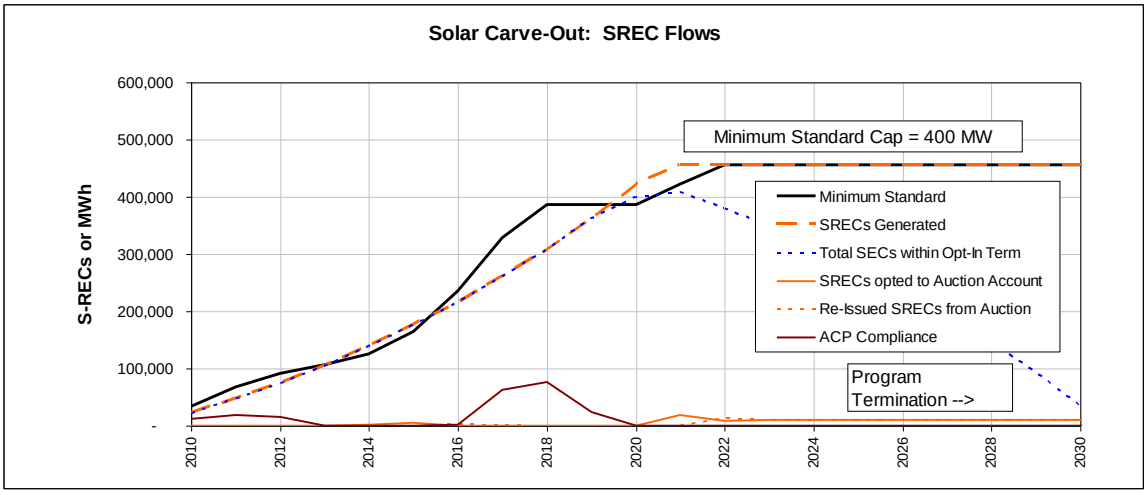


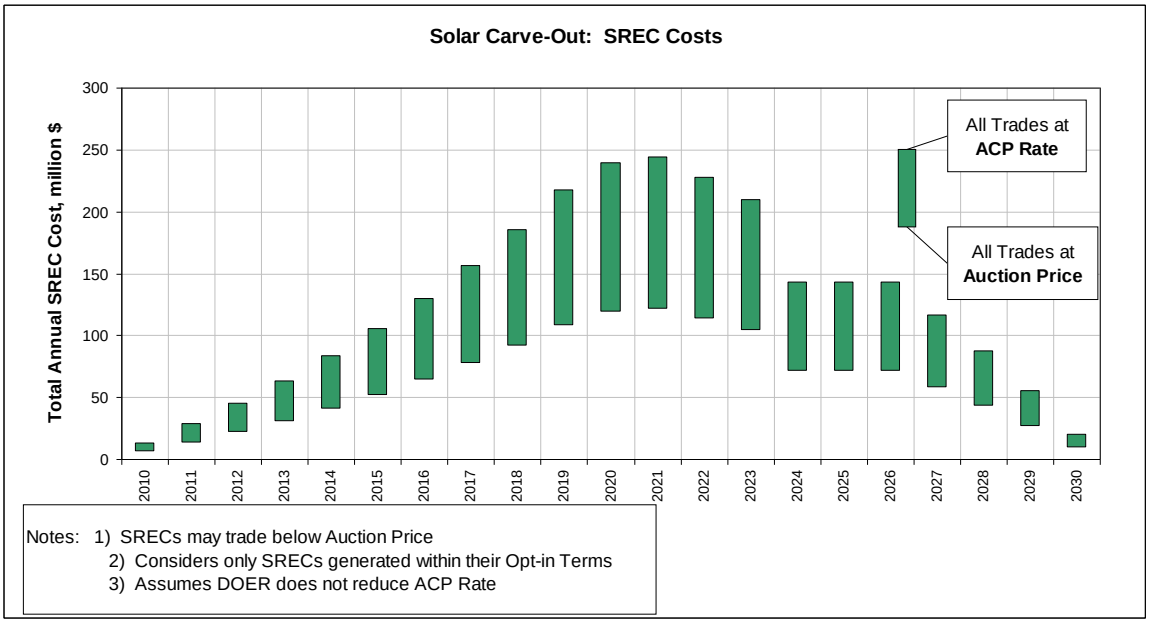


Scenario #3 – Graphical Results

Solar Capacity installed in 2010: 20 MW (full year available capacity)
Solar Installation Growth Rate: 10%/year

This scenario assumes that the solar market does not install sufficient capacity to meet the 2010 Minimum Standard and its growth rate remains much lower than the Base Growth Rate.





Scenario #4 – Graphical Results

Solar Capacity installed in 2010: 20 MW (full year available capacity)
Solar Installation Growth Rate: 35%/year

This scenario assumes that the solar market does not install sufficient capacity to meet the 2010 Minimum Standard but that its growth rate exceeds the Base Growth Rate.